



INFORMATION DISCLOSURE CITATION
(Use several sheets if necessary)

Atty. Docket No.
SMARB11.001AUS (82145-12)

Serial No. 10/777,995

Applicant(s)
CMM, David Malcolm, et al.

Filing Date
February 12, 2004

Group
2879

U.S. PATENT DOCUMENTS

* Examiner Initial		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
BW	A1	1,235,274	07/31/1917	Wood	362	517	03/03/1916
	A2	1,610,124	12/07/1926	Godley	362	293	06/30/1924
	A3	1,732,884	10/22/1929	Foster	362	297	02/14/1927
	A4	1,737,027	11/26/1929	Schoonmaker	362	301	12/13/1924
	A5	1,759,720	05/20/1930	Stitzer	362	297	04/22/1920
	A6	2,341,658	02/15/1944	Salani	362	297	03/04/1942
	A7	2,877,341	03/10/1959	Edgerton	362	268	06/28/1955
	A8	2,906,858	09/29/1959	Morton Jr.	219	121.5	10/10/1957
	A9	2,981,819	04/25/1961	Gregory	219	405	10/23/1957
	A10	3,108,173	10/22/1963	Barrett, et al.	221	197	07/22/1960
	A11	3,188,459	06/08/1965	Bridwell	362	227	11/02/1962
	A12	3,239,651	03/08/1966	Silberman	219	388	08/21/1963
	A13	3,240,915	03/15/1966	Carter, et al.	392	411	09/19/1962
	A14	3,292,028	12/13/1966	Van Ornum	313	30	06/20/1962
	A15	3,366,815	01/30/1968	Anderson	313	32	01/30/1968
	A16	3,405,305	10/08/1968	Winzeler, et al.	313	231.51	12/28/1964
	A17	3,463,957	08/26/1969	Fuksiewicz	313	32	04/06/1966
	A18	3,596,124	07/27/1971	Cleaver, et al.	313	62	10/16/1968
	A19	3,603,827	09/07/1971	Degawa, et al.	313	24	06/26/1969
	A20	3,612,933	10/12/1971	Troue	313	32	11/21/1969
	A21	3,651,358	03/21/1972	Troue	313	12	05/04/1970
	A22	3,739,215	06/12/1973	Murai	313	24	08/09/1971
	A23	3,816,784	06/11/1974	Weninger	313	32	05/03/1973
	A24	3,983,436	09/21/1976	Schafer, et al.	313	35	12/04/1975
	A25	4,027,185	05/31/1977	Nodwell, et al.	313	35	09/10/1975
	A26	4,115,163	09/19/1978	Gorina, et al.	117	103	01/08/1976
	A27	4,151,008	04/24/1979	Kirkpatrick	438	799	03/23/1977
	A28	4,325,006	04/13/1982	Morton	315	112	08/01/1979
	A29	4,331,485	05/25/1982	Gat	438	795	03/03/1980
EXAMINER /Bumsuk Won/			DATE CONSIDERED 11/09/2006				

*EXAMINER:

Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-A820
(also form PTO-1449)

P09C/REV03

Patent and Trademark Office * U.S. DEPARTMENT OF COMMERCE

INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>	Atty. Docket No. SMARB11.001AUS (82145-12)	Serial No. 10/777,995
	Applicant(s) CAMM, David Malcolm, et al.	
	Filing Date February 12, 2004	Group 2879

U.S. PATENT DOCUMENTS

* Examiner, Initial		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
BW	A30	4,370,175	01/25/1983	Levatter	438	57	12/03/1979
	A31	4,398,094	08/09/1983	Hiramoto	250	492.1	12/31/1980
	A32	4,417,300	11/22/1983	Bodmer	362	304	06/19/1981
	A33	4,421,048	12/20/1983	Adema, et al.	114	222	10/22/1981
	A34	4,550,684	11/05/1985	Mahawili	118	724	08/11/1983
	A35	4,567,352	01/28/1986	Mimura, et al.	219	405	02/22/1984
	A36	4,596,019	06/17/1986	Schmidt, et al.	373	22	09/27/1983
	A37	4,649,261	03/10/1987	Sheets	219	390	02/07/1985
	A38	4,683,525	07/28/1987	Camm	362	346	11/05/1986
	A39	4,698,486	10/06/1987	Sheets	219	390	02/07/1985
	A40	4,700,102	10/13/1987	Camm, et al.	313	24	10/13/1987
	A41	4,794,230	12/27/1988	Seliskar, et al.	219	121.52	02/16/1984
	A42	4,937,490	06/26/1990	Camm, et al.	313	12	12/19/1988
	A43	4,945,288	07/31/1990	Morris, et al.	313	25	12/21/1988
	A44	5,036,242	07/30/1991	Huber, et al.	313	35	10/19/1989
	A45	5,046,145	09/03/1991	Drouet	219	121.36	04/20/1990
	A46	5,076,051	12/31/1991	Naff	60	203.1	02/06/1990
	A47	5,147,130	09/15/1992	Watanuki	362	218	11/02/1989
	A48	5,219,786	06/15/1993	Noguchi	438	5	06/11/1992
	A49	5,336,641	08/09/1994	Fair, et al.	438	486	03/17/1992
	A50	5,446,825	08/29/1995	Moslehi, et al.	392	416	08/31/1993
	A51	5,561,735	10/01/1996	Camm	392	416	08/30/1994
	A52	5,608,227	03/04/1997	Dierks, et al.	250	492.1	08/22/1995
	A53	5,727,017	03/10/1998	Maurer, et al.	374	9	04/10/1996
	A54	5,756,959	05/26/1998	Freeman, et al.	219	121.49	10/28/1996
	A55	5,777,437	07/07/1998	Neister	313	635	07/01/1996
	A56	5,898,270	04/27/1999	Oiye, et al.	313	570	04/11/1997
EXAMINER /Bumsuk Won/				DATE CONSIDERED 11/09/2006			

*EXAMINER:

Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-A820

(also form PTO-1449)

P09C/REV03

Patent and Trademark Office * U.S. DEPARTMENT OF COMMERCE

INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>	Atty. Docket No. SMARB11.01AUS (82145-12)	Serial No. 10/777,995
	Applicant(s) CAMM, David Malcolm, et al.	
	Filing Date February 12, 2004	Group 2879

FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
							YES	NO
BW	B5	EP 0 105 230	03/25/1987	EP	H01S 3	04		
	B6	GB 2,065,973	07/01/1981	UK	H01L 21	268		
	B7	GB 2,082,745	03/10/1982	UK	F 21 V 7	04		
	B8	GB 2,111,186	06/29/1983	UK	F 21 V 7	06		
	B9	GB 2,199,693	08/15/1990	UK	H01J 61	52		
	B10	GB 2,406,725	04/06/2005	UK	H01L 21	00		
	B11	JP 57 197742	12/04/1982	JP	H01J 61	52	X	
	B12	JP 00 80729	05/20/1982	JP	H01L 21	324		
	B13	JP 7 22194 A	01/24/1995	JP	H05H 1	26		X
	B14	NO 32864	08/08/1921	NO	219	349		X
	B15	WO 2000/067298	11/09/2000	PCT	H01L 21	00		
	B16	WO 2001/054166	07/26/2001	PCT	H01J 61	52		
	B17	WO 2002/047123	06/13/2002	PCT	C30B 31	12		
	B18	WO 2002/047143	06/13/2002	PCT	C30B 31	12		
	B19	WO 2003/060447	07/24/2003	PCT	G01J 5	00		
	B20	WO 2004/057650	07/08/2004	PCT	H01L 21	00		
	B21	WO 2005/059991	06/30/2005	PCT	B25B 11	00		
	B22	WO 2005/078762	08/25/2005	PCT	H01J 61	00		

OTHER ART (including Author, Title, Date, Pertinent Pages, Etc.)

BW	C1	Combined International Search Report and Written Opinion for PCT/CA2004/000202, dated April 12, 2006.
	C2	Atlas Electric Devices Company, "Specialists in Environmental and Material Testing", Bulletin 1650, Jul. 1992, pp. 1-8, Chicago, Illinois.
	C3	Blake, J. et al., "Slip Free Rapid Thermal Processing", (1987), Vol. 92, Mat. Res. Soc. Symp. Proc., p. 265-272.
	C4	Bomke H.A., et al. "Annealing of ion-implanted silicon by an incoherent light pulse", Appl. Phys. Lett., Vol. 33, No. 11, December 1, 1978, pp. 955-957.
	C5	Brochure: "High Performance Flash and Arc Lamps" by PerkinElmer optoelectronics, 39 pages, available at http://optoelectronics.perkinelmer.com/content/RelatedLinks/flashcatalog.pdf .
	C6	Burggraaf P.S. "Rapid Wafer Heating: Status 1983", Semiconductor International, December, 1983, pp. 69-74.
	C7	Camm D.M., et al. "Engineering Ultra-shallow Junctions Using rTPtm" 10th IEEE International Conference on Advanced Thermal Processing of Semiconductors - RTP 2002 p 5-10
EXAMINER /Bumsuk Won/		DATE CONSIDERED 11/09/2006

*EXAMINER:

Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-A820
(also form PTO-1449)

P09C/REV03

Patent and Trademark Office * U.S. DEPARTMENT OF COMMERCE

INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>	Atty. Docket No. SMARB11.001AUS (82145-12)	Serial No. 10/777,995
	Applicant(s) CAMM, David Malcolm, et al.	
	Filing Date February 12, 2004	Group 2879

U.S. PATENT DOCUMENTS

* Examiner Initial		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
BW	A57	5,971,565	10/26/1999	Zapata, et al.	362	294	10/20/1995
	A58	6,066,516	05/23/2000	Miyasaka	438	149	01/31/1997
	A59	6,156,995	12/05/2000	Severance Jr.	219	121.5	12/02/1998
	A60	6,293,696	09/25/2001	Guardado	374	2	05/03/1999
	A61	6,303,411	10/16/2001	Camm, et al.	438	149	05/03/1999
	A62	6,417,625	07/09/2002	Brooks, et al.	315	111.31	08/04/2000
	A63	6,534,752	03/18/2003	Camm, et al.	219	497	06/12/2001
	A64	6,594,446	09/25/2001	Camm, et al.	392	416	12/04/2000
	A65	6,621,199	09/16/2003	Parfeniuk, et al.	313	231.51	01/21/2000
	A66	6,858,987	02/22/2005	Hiramoto	315	105	05/21/2003
	A67	6,859,616	02/22/2005	Kusuda, et al.	392	416	12/05/2003
	A68	6,941,063	09/06/2005	Camm, et al.	392	416	12/04/2001
	A69	6,960,883	11/01/2005	Mizoziri, et al.	313	594	12/24/2002
	A70	6,963,692	11/08/2005	Camm, et al.	392	416	04/30/2003
	A71	2004/0105670	06/03/2004	Kusuda, et al.	392	418	09/11/2003
	A72	2004/0178553	09/16/2004	Camm, et al.	269	55	12/19/2003
	A73	2005/0062388	03/24/2005	Camm, et al.	313	231.71	11/02/2004
	A74	2005/0063453	03/24/2005	Camm, et al.	374	161	11/08/2004
	A75	2005/0133167	06/23/2005	Camm, et al.	156	345.51	12/20/2004
	A76	2006/0096677	05/11/2006	Camm, et al.	148	565	12/14/2005

FOREIGN PATENT DOCUMENTS

* Examiner Initial		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
							YES	NO
BW	B1	CA 1,015,817	08/16/1977	CA	313	15		
	B2	EP 0 404 406	12/27/1990	EP	H01J 61	52		
	B3	EP 0 841 685	05/13/1998	EP	H01J 61	02		
	B4	EP 0 102 931	03/14/1984	EP	F 21 V 7	00		
EXAMINER /Bumsuk Won/				DATE CONSIDERED 11/09/2006				

*EXAMINER:

Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-A820
(also form PTO-1449)

P09C/REV03

Patent and Trademark Office * U.S. DEPARTMENT OF COMMERCE

INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>	Atty. Docket No. SMARB11.001AUS (82145-12)	Serial No. 10/777,995
	Applicant(s) CAMM, David Malcolm, et al.	
	Filing Date February 12, 2004	Group 2879

OTHER ART (including Author, Title, Date, Pertinent Pages, Etc.)

BW	C8	Camm D.M., et al. "High Power Arc Lamp RTP System for High Temperature Annealing Applications", 2nd International Rapid Thermal Conference, 1994, pp. 1-7.
	C9	Camm D.M., et al. "Spike Thermal Processing Using Arc Lamps", Advances in Rapid Thermal Processing, 2000.
	C10	Cibere J.J., et al. "Flash Thermal Processing Through the Melting Point of Silicon", 11th IEEE International Conference on Advanced Thermal processing of Semiconductors - RTP 2003
	C11	Cohen R.L., et al. "Thermally assisted flash annealing of silicon and germanium", Appl. Phys. Lett., Vol. 33, No. 8, October 15, 1978, pp. 751-753.
	C12	da Silva T., et al., "Automated Test System for NIF Flashlamps", Pulse Power Plasma Science 2001 Conference, Las Vegas, Nevada, June 17-22, 2001
	C13	DSI Industrial Lighting Products web site, http://www.heatbuster.com/ , Nov. 29, 1999, various pages including http://www.heatbuster.com/Prod_Cold_Mirror.htm , http://www.heatbuster.com/Prod_Hot_Mirror.htm , http://www.heatbuster.com/Prod_High_Temp_Cold.htm , http://www.heatbuster.com/Technical.html .
	C14	Electric Devices Company, "Xenon Arc Light Systems", Bulletin 1183, pp. 1-4, Chicago, Illinois.
	C15	Fiory A.T., et al. "Annealing Ultra-Low Energy Boron Implants with an Arc Lamp System", RTP 1999, 1999, pp. 273-280.
	C16	Fiory A.T., et al. "Electrical Measurements of Annealed Boron Implants for Shallow Junctions", Advances in Rapid Thermal Processing, Vol. 99-10, 1999, pp. 133-140.
	C17	Fiory A.T., et al. "Spike Annealing of Implanted PMOS Gates", Proc. of RTP 2000 Conference, September 20-22, 2000, pp. 1-8.
	C18	Gelpey J.C., et al. "Process Control for a Rapid Optical Annealing System", Mat. Res. Soc. Symp. Proc., Materials Res. Soc., Vol. 82, 1986.
	C19	Gelpey J.C., et al. "Rapid Optical Annealing Using the Water-Wall DC Arc Lamp", Microelectronic Manufacturing and Testing, August, 1983, pp. 22-24.
	C20	Klabes R., et al. "Pulsed Incoherent Light Annealing of Arsenic and Phosphorous Implanted Polycrystalline Silicon", physica status solidi, 1982, pp. K5-7, K9-12.
	C21	Lefrancois, M.E., et al. "Temperature Uniformity During Impulse™ Anneal", 8 th International Conference on Advanced Thermal Processing of Semiconductors, RTP 2000, September 20-22, 2000, pp. 1-6.
	C22	Lietoila A., et al. "Temperature rise induced in Si by continuous xenon arc lamp radiation", J. Appl. Phys., Vol. 53, No. 2, February, 1982, pp. 1169-1172.
	C23	Luc, J. "Arc annealing of BF+2 implanted silicon by a short pulse flash lamp", Appl. Phys. Lett., Vol. 36, No. 1, January 1, 1980, pp. 73-76.
	C24	Lunde AR. "Nasa Tech Brief", B75-1008, Lewis Research Center, April, 1975.
	C25	Powell R.A., et al. "Activation of arsenic-implanted silicon using an incoherent light source", Appl. Phys. Lett., Vol. 39, No. 2, July 15, 1981, pp. 150-152
	C26	Powell R.A., et al. "Annealing of implantation damage in integrated-circuit devices using an incoherent light source", J. Vac. Sci. Technol., Vol. 20, No. 1, January, 1982, pp. 32-36.
	C27	Products, Capabilities, Tamarack Scientific Co., Inc.
	C28	Ross J., et al. "Characterizing Implant Behavior During Flash RTP by Means of Backside Diagnostics" 10th IEEE International Conference on Advanced Thermal Processing of Semiconductors - RTP 2002 p. 99-105

EXAMINER /Bumsuk Won/	DATE CONSIDERED 11/09/2006
---------------------------------	--------------------------------------

*EXAMINER:

Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-A820
(also form PTO-1449)

P09C/REV03

Patent and Trademark Office * U.S. DEPARTMENT OF COMMERCE

INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>	Atty. Docket No. SMARB11.091AUS (82145-12)	Serial No. 10/777,995
	Applicant(s) CAMM, David Malcolm, et al.	
	Filing Date February 12, 2004	Group 2879

OTHER ART (including Author, Title, Date, Pertinent Pages, Etc.)

BW	C29	Searchlight Model-100, Tamarack Scientific Co., Inc.
	C30	Sedgwick T.O. "Short Time Annealing", J. Electrochem. Soc., Vol. 130, No. 2, February, 1983, p. 484-492.
	C31	Stuart G.C., et al. "Temperature Diagnostics for a Dual-ARC fRTP tool" 10th IEEE International Conference on Advanced Thermal Processing of Semiconductors - RTP 2002 p. 77-82
	C32	Technical information from Heraeus Noblelight, available at http://www.noblelight.net
	C33	"Transient Calorimeter Calibration System", AFFDL-TR-75-24, Tamarack Scientific Company, Orange, California, March, 1975, pp. 1-50.
	C34	Wilson, S.R., et al., "An Overview and Comparison of Rapid Thermal Processing Equipment: A Users Viewpoint", (1986), Vol. 52, Mat. Res. Soc. Symp. Proc., p. 181-190.
EXAMINER /Bumsuk Won/		DATE CONSIDERED 11/09/2006

*EXAMINER:

Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-A820
(also form PTO-1449)

P09C/REV03

Patent and Trademark Office * U.S. DEPARTMENT OF COMMERCE



INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)	Atty. Docket No. SMARB11.011AUS (82145-12)	Serial No. 10/777,995
	Applicant(s) CMM, David Malcolm, et al.	
	Filing Date February 12, 2004	Group 2879

U.S. PATENT DOCUMENTS

* Examiner Initial		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
BW	A1	5,168,194	12-01-1992	Littlechild et al.	313	632	08-28-1991
	A2	6,608,967	08-19-2003	Arrison	392	407	06-07-2000
	A3	6,885,815	04-26-2005	Kusuda et al.	392	416	07-16-2003

FOREIGN PATENT DOCUMENTS

* Examiner Initial		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION	
							YES	NO
BW	B1	CA 1,239,437	07-19-1988	CA	H01J 61	52		
	B2	GB 1468137	03-23-1977	UK				
	B3	WO 2005/078762 A3 (ISR)	06-01-2006	PCT	H01J 61	00		

OTHER ART (including Author, Title, Date, Pertinent Pages, Etc.)

BW	C1	Gelpey, J. C., et al., "Advanced Annealing for Sub-130nm Junction Formation", 201st Electrochemical Society Meeting, Symposium Q1, Rapid Thermal and Other Short-Time Processing Technologies III, May 12-17, 2002, paper 735 (May 2002).
BW	C2	Tichy, R. S., et al., "Annealing of Ultra-Shallow Implanted Junctions Using Arc-Lamp Technology: Achieving the 90 nm Node", 9th IEEE International Conference on Advanced Thermal Processing of Semiconductors - RTP 2001 (Sept. 2001).

EXAMINER	/Bumsuk Won/	DATE CONSIDERED	11/09/2006
----------	--------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.
Form PTO-A820 P09C/REV03 Patent and Trademark Office * U.S. DEPARTMENT OF COMMERCE
(also form PTO-1449)

PAGE 1 OF 1

2761145
071806

FORM PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
SMAR811.001AUSAPPLICATION NO.
10/777,995INFORMATION DISCLOSURE STATEMENT
BY APPLICANT

(USE SEVERAL SHEETS IF NECESSARY)

APPLICANT
Camm, et al.FILING DATE
February 12, 2004GROUP
~~2884~~ 2879

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
BW	2002/0102098 A1	08/01/02	Camm, et al.			

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO

EXAMINER
INITIAL

OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)

H:\DOCS\CSC\CSC-7252.DOC
062304

EXAMINER

/Bumsuk Won/

DATE CONSIDERED

11/09/2006

*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.